

Application No. 10/087,024
Paper Dated October 17, 2003
In Reply to Office Action of March 26, 2003
Attorney Docket No. 702-020310

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims

Claim 1 (Previously presented): Method for increasing and/or prolonging in vivo or in vitro activity of plant growth regulators (PGRs), comprising:

a) locally increasing the concentration of active plant growth regulators in a plant and/or plant part(s) by either or both of the following:

- 1) administering the PGR(s) in encapsulated form;
- 2) administering PGR(s) that have been chemically modified by linking it (them) to one or more carrier molecules, optionally with interposing of a spacer molecule;

b) increasing the sensitivity of the plant and/or plant part(s) to the activity of plant growth regulators by administration or application of one or more means which result in a defensive response in the plant.

Claim 2 (Previously presented): The method of claim 1, wherein the chemical modification comprises addition of a protecting group selected from the group consisting of tertiary-butyloxycarbonyl, benzyloxycarbonyl, propionyl, and bovine serum albuminate.

Claim 3 (Previously presented): A plant metabolism regulator comprising a compound selected from the group consisting of tertiary-butyloxycarbonyl aminooxyacetic acid, benzyloxycarbonyl aminooxyacetic acid, N,N' (diaminooxyacetic acid) ethylenediamine, N,N' (di-tert-butyloxycarbonylaminooxyacetic acid), propionic aminooxyacetic acid, 1-N-indole-3-hexanoic acid, indoleacetic acid-N-conjugate with bovine serum albuminate, indole butyric acid-N-conjugate with bovine serum albuminate, and indoleacetic acid-C-conjugate with bovine serum albuminate.

Claim 4 (Previously presented): The plant metabolism regulator of claim 3, wherein the plant metabolism regulator inhibits plant ethylene activity.

Claim 5 (Previously presented): The plant metabolism regulator of claim 3, wherein the plant metabolism regulator delays flower senescence.

Claim 6 (Previously presented): The plant metabolism regulator of claim 3, wherein the plant metabolism regulator induces root formation.

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Claim 7 (Previously presented): A method for regulating plant metabolism, comprising the administration of a compound selected from the group consisting of tertiary-butyloxycarbonyl aminooxyacetic acid, benzyloxycarbonyl aminooxyacetic acid, N,N' (diaminooxyacetic acid) ethylenediamine, N,N' (di-tert-butyloxycarbonylaminoxyacetic acid), propionic aminooxyacetic acid, 1-N-indole-3-hexanoic acid, indoleacetic acid-N-conjugate with bovine serum albuminate, indole butyric acid-N-conjugate with bovine serum albuminate, and indoleacetic acid-C-conjugate with bovine serum albuminate.

Claim 8 (Previously presented): The method of claim 7, wherein the plant metabolism comprises plant ethylene activity.

Claim 9 (Previously presented): The method of claim 7, wherein the plant metabolism comprises flower senescence.

Claim 10 (Previously presented): The method of claim 7, wherein the plant metabolism comprises root formation.

Claim 11 (Previously presented): A plant metabolism regulator comprising a plant growth regulator compound linked to a compound selected from the group consisting of tertiary-butyloxycarbonyl aminooxyacetic acid, benzyloxycarbonyl aminooxyacetic acid, N,N' (diaminooxyacetic acid) ethylenediamine, N,N' (di-tert-butyloxycarbonylaminoxyacetic acid), propionic aminooxyacetic acid, 1-N-indole-3-hexanoic acid, indoleacetic acid-N-conjugate with bovine serum albuminate, indole butyric acid-N-conjugate with bovine serum albuminate, and indoleacetic acid-C-conjugate with bovine serum albuminate.

Claim 12 (Previously presented): The plant metabolism regulator of claim 11, wherein the plant metabolism regulator inhibits plant ethylene activity.

Claim 13 (Previously presented): The plant metabolism regulator of claim 11, wherein the plant metabolism regulator delays flower senescence.

Claim 14 (Previously presented): The plant metabolism regulator of claim 11, wherein the plant metabolism regulator induces root formation.

Claim 15 (New): The plant metabolism regulator of claim 11, wherein the plant metabolism regulator is tertiary-butyloxycarbonyl aminooxyacetic acid.